

National 4 Homework 5

You can use a calculator in Q3

1. Calculate

(a) $225 \div 6$ (b) 21.7×400 (c) $25.63 - 7.8 + 4.98$ (d) $42 + 8 \div 2$ (e) $-4 + (-10)$

(f) $5 - (-7) - 18$ (g) $-4 \times (-9)$ (h) $56 \div (-8)$ (i) $5 + 4^2 \times 2$ (j) $(-5)^2$

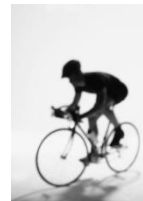
2. The area of the Indian Ocean is approximately 7.356×10^7 square kilometres.
Write this number in full.

3. A packet of 36 dishwasher tablets costs £7.99. A larger packet containing 60 tablets costs £9.99.
Calculate the cost per tablet to the nearest penny for each packet and say which offers best value.

4. Amy cycled from Kinross to St Andrews at an average speed of 12mph.
She left Kinross at 2.25pm and arrived in St Andrews at 4.55pm.

(a) How long did her journey take?

(b) Calculate the distance between Kinross and St Andrews.



5. The average temperature for February in Rio is 32°C .

The average temperature for February in Moscow is 41°C less than the temperature in Rio.
What is the average temperature in Moscow in February?

6.



Nine cakes cost £7.92. How much will seven cakes cost?

7. Mike parked his car in a car park in Dundee for 3 hours and was charged £4.35.
Calculate the hourly rate for parking.

8. A car travels 267 miles on 30 litres of diesel.
How far should it travel on a full tank of 50 litres of diesel?

9. Jill is making fresh fruit juice.
She uses oranges and mangos in the ratio 7:2.
If she uses 6 mangos, how many oranges does she need?



10. At Airlee Swimming and Diving Club, the ratio of swimmers to divers is 125:50.



(a) Express this ratio in its simplest form.

(b) The club have been awarded a grant of £5250 from the council.

The money is to be divided between the swimmers and divers in the same ratio as above.
How much money should the divers receive?

